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#20

SEQUENCE LISTING

<110> Hilton, Douglas J.  
Alexander, Warren S.  
Viney, Elizabeth M.  
Wilson, Tracy A.  
Richardson, Rachel  
Starr, Robyn  
Nicholson, Sandra E.  
Metcalf, Donald  
Nicola, Nicos A.



<120> THERAPEUTIC AND DIAGNOSTIC AGENTS

<130> Davies Collison Cave

<140> 08/962,560  
<141> 1997-10-31

<160> 68

<170> PatentIn Ver. 2.1

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 gacgctatgg cccaccctc cagctggccc ctcgagtagg 160  
 atg gta gca cgc aac cag gtg gca gcc gac aat gcg atc tcc ccg gca 208  
 Met Val Ala Arg Asn Gln Val Ala Ala Asp Asn Ala Ile Ser Pro Ala  
 1 . 5 10 15  
 gca gag ccc cga cgg cgg tca gag ccc tcc tcg tcc tcg tct tcg tcc 256  
 Ala Glu Pro Arg Arg Ser Glu Pro Ser Ser Ser Ser Ser Ser Ser Ser  
 20 25 30  
 tcg cca gcg gcc ccc gtg cgt ccc cgg ccc tgc ccg gcg gtc cca gcc 304  
 Ser Pro Ala Ala Pro Val Arg Pro Arg Pro Cys Pro Ala Val Pro Ala  
 35 40 45  
 cca gcc cct ggc gac act cac ttc cgc acc ttc cgc tcc cac tcc gat 352  
 Pro Ala Pro Gly Asp Thr His Phe Arg Thr Phe Arg Ser His Ser Asp  
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 tac cgg cgc atc acg cgg acc agc gcg ctc ctg gac gcc tgc ggc ttc 400  
 Tyr Arg Arg Ile Thr Arg Thr Ser Ala Leu Leu Asp Ala Cys Gly Phe  
 65 70 75 80  
 tat tgg gga ccc ctg agc gtg cac ggg gcg cac gag cgg ctg cgt gcc 448  
 Tyr Trp Gly Pro Leu Ser Val His Gly Ala His Glu Arg Leu Arg Ala  
 85 90 95  
 gag ccc gtg ggc acc ttc ttg gtg cgc gac agt cgt caa cgg aac tgc 496  
 Glu Pro Val Gly Thr Phe Leu Val Arg Asp Ser Arg Gln Arg Asn Cys  
 100 105 110  
 ttc ttc gcg ctc agc gtg aag atg gct tcg ggc ccc acg agc atc cgc 544  
 Phe Phe Ala Leu Ser Val Lys Met Ala Ser Gly Pro Thr Ser Ile Arg  
 115 120 125  
 gtg cac ttc cag gcc ggc cgc ttc cac ttg gac ggc agc cgc gag acc 592  
 Val His Phe Gln Ala Gly Arg Phe His Leu Asp Gly Ser Arg Glu Thr  
 130 135 140  
 ttc gac tgc ctt ttc gag ctg ctg gag cac tac gtg ggc gcg ccg cgc 640  
 Phe Asp Cys Leu Phe Glu Leu Leu Glu His Tyr Val Ala Ala Pro Arg  
 145 150 155 160  
 cgc atg ttg ggg gcc ccg ctg cgc cag cgc cgc gtg cgg ccg ctg cag 688  
 Arg Met Leu Gly Ala Pro Leu Arg Gln Arg Arg Val Arg Pro Leu Gln  
 165 170 175  
 gag ctg tgt cgc cag cgc atc gtg gcc gtg ggt cgc gag aac ctg 736  
 Glu Leu Cys Arg Gln Arg Ile Val Ala Ala Val Gly Arg Glu Asn Leu  
 180 185 190  
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Pro Phe Gln Ile			
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Pro Ala Pro Gly Asp Thr His Phe Arg Thr Phe Arg Ser His Ser Asp			
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Tyr Trp Gly Pro Leu Ser Val His Gly Ala His Glu Arg Leu Arg Ala			
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Glu Pro Val Gly Thr Phe Leu Val Arg Asp Ser Arg Gln Arg Asn Cys			
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Phe Phe Ala Leu Ser Val Lys Met Ala Ser Gly Pro Thr Ser Ile Arg			
115	120	125	
Val His Phe Gln Ala Gly Arg Phe His Leu Asp Gly Ser Arg Glu Thr			
130	135	140	

Phe Asp Cys Leu Phe Glu Leu Leu Glu His Tyr Val Ala Ala Pro Arg  
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Arg Met Leu Gly Ala Pro Leu Arg Gln Arg Arg Val Arg Pro Leu Gln  
165 170 175

Glu Leu Cys Arg Gln Arg Ile Val Ala Ala Val Gly Arg Glu Asn Leu  
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Pro Phe Gln Ile  
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<222> (223)..(819)

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gctcggcgga ccagctgtct gggacgtgtt gactcatctc cc atg acc ctg cgg 234  
Met Thr Leu Arg  
1

tgc ctg gag ccc tcc ggg aat gga gcg gac agg acg cgg agc cag tgg 282  
Cys Leu Glu Pro Ser Gly Asn Gly Ala Asp Arg Thr Arg Ser Gln Trp  
5 10 15 20

ggg acc gcg ggg ttg ccg gag gaa cag tcc ccc gag gcg gcg cgt ctg 330  
Gly Thr Ala Gly Leu Pro Glu Glu Gln Ser Pro Glu Ala Ala Arg Leu  
25 30 35

gcg aaa gcc ctg cgc gag ctc agt caa aca gga tgg tac tgg gga agt 378  
Ala Lys Ala Leu Arg Glu Leu Ser Gln Thr Gly Trp Tyr Trp Gly Ser  
40 45 50

atg act gtt aat gaa gcc aaa gag aaa tta aaa gag gct cca gaa gga 426  
Met Thr Val Asn Glu Ala Lys Glu Lys Leu Lys Glu Ala Pro Glu Gly  
55 60 65

act ttc ttg att aga gat agt tcg cat tca gac tac cta cta act ata 474  
Thr Phe Leu Ile Arg Asp Ser Ser His Ser Asp Tyr Leu Leu Thr Ile  
70 75 80

tcc gtt aag acg tca gct gga ccg act aac ctg cg <sup>g</sup> att gag tac caa Ser Val Lys Thr Ser Ala Gly Pro Thr Asn Leu Arg Ile Glu Tyr Gln 85 90 95 100	522
gat ggg aaa ttc aga ttg gat tct atc ata tgt gtc aag tcc aag ctt Asp Gly Lys Phe Arg Leu Asp Ser Ile Ile Cys Val Lys Ser Lys Leu 105 110 115	570
aaa cag ttt gac agt gtg gtt cat ctg att gac tac tat gtc cag atg Lys Gln Phe Asp Ser Val Val His Leu Ile Asp Tyr Tyr Val Gln Met 120 125 130	618
tgc aag gat aaa cgg aca ggc cca gaa gcc cca cgg aat ggg act gtt Cys Lys Asp Lys Arg Thr Gly Pro Glu Ala Pro Arg Asn Gly Thr Val 135 140 145	666
cac ctg tac ctg acc aaa cct ctg tat aca tca gca ccc act ctg cag His Leu Tyr Leu Thr Lys Pro Leu Tyr Thr Ser Ala Pro Thr Leu Gln 150 155 160	714
cat ttc tgt cga ctc gcc att aac aaa tgt acc ggt acg atc tgg gga His Phe Cys Arg Leu Ala Ile Asn Lys Cys Thr Gly Thr Ile Trp Gly 165 170 175 180	762
ctg cct tta cca aca aga cta aaa gat tac ttg gaa gaa tat aaa ttc Leu Pro Leu Pro Thr Arg Leu Lys Asp Tyr Leu Glu Glu Tyr Lys Phe 185 190 195	810
cag gta taagtatttc tctctcttt tcgtttttt taaaaaaaaaaa aaaaacacat Gln Val	866
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<212> PRT  
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<400> 6

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					20				25				30		

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35 40 45

Tyr Trp Gly Ser Met Thr Val Asn Glu Ala Lys Glu Lys Leu Lys Glu  
50 55 60

Ala Pro Glu Gly Thr Phe Leu Ile Arg Asp Ser Ser His Ser Asp Tyr  
65 70 75 80

Leu Leu Thr Ile Ser Val Lys Thr Ser Ala Gly Pro Thr Asn Leu Arg  
85 90 95

Ile Glu Tyr Gln Asp Gly Lys Phe Arg Leu Asp Ser Ile Ile Cys Val  
100 105 110

Lys Ser Lys Leu Lys Gln Phe Asp Ser Val Val His Leu Ile Asp Tyr  
115 120 125

Tyr Val Gln Met Cys Lys Asp Lys Arg Thr Gly Pro Glu Ala Pro Arg  
130 135 140

Asn Gly Thr Val His Leu Tyr Leu Thr Lys Pro Leu Tyr Thr Ser Ala  
145 150 155 160

Pro Thr Leu Gln His Phe Cys Arg Leu Ala Ile Asn Lys Cys Thr Gly  
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Glu Tyr Lys Phe Gln Val  
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<222> (18)..(695)

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Met Ser Arg Pro Leu Asp Thr Ser Leu Arg Leu Lys Thr Phe Ser Ser  
15 20 25

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Lys Ser Glu Tyr Gln Leu Val Val Asn Ala Val Arg Lys Leu Gln Glu  
30 35 40

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Ser Gly Phe Tyr Trp Ser Ala Val Thr Gly Gly Glu Ala Asn Leu Leu			
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Gln Arg His Phe Phe Thr Leu Ser Val Lys Thr Gln Ser Gly Thr Lys			
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aac cta cgc atc cag tgt gag ggg ggc agc ttt tcg ctg cag agt gac		338	
Asn Leu Arg Ile Gln Cys Glu Gly Ser Phe Ser Leu Gln Ser Asp			
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Pro Arg Ser Thr Gln Pro Val Pro Arg Phe Asp Cys Val Leu Lys Leu			
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gtg cac cac tac atg ccg cct cca ggg acc ccc tcc ttt tct ttg cca		434	
Val His His Tyr Met Pro Pro Pro Gly Thr Pro Ser Phe Ser Leu Pro			
125	130	135	
ccc acg gaa ccc tcg tcc gaa gtt ccg gag cag cca cct gcc cag gca		482	
Pro Thr Glu Pro Ser Ser Glu Val Pro Glu Gln Pro Pro Ala Gln Ala			
140	145	150	155
ctc ccc ggg agt acc ccc aag aga gct tac tac atc tat tct ggg ggc		530	
Leu Pro Gly Ser Thr Pro Lys Arg Ala Tyr Tyr Ile Tyr Ser Gly Gly			
160	165	170	
gag aag att ccg ctg gta ctg agc cga cct ctc tcc tcc aac gtg gcc		578	
Glu Lys Ile Pro Leu Val Leu Ser Arg Pro Leu Ser Ser Asn Val Ala			
175	180	185	
acc ctc cag cat ctt tgt cgg aag act gtc aac ggc cac ctg gac tcc		626	
Thr Leu Gln His Leu Cys Arg Lys Thr Val Asn Gly His Leu Asp Ser			
190	195	200	
tat gag aaa gtg acc cag ctg cct gga ccc att cgg gag ttc ctg gat		674	
Tyr Glu Lys Val Thr Gln Leu Pro Gly Pro Ile Arg Glu Phe Leu Asp			
205	210	215	
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Gln Tyr Asp Ala Pro Leu			
220	225		
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<212> PRT  
<213> Mus musculus

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Leu Val Val Asn Ala Val Arg Lys Leu Gln Glu Ser Gly Phe Tyr Trp  
                  35                 40                 45

Ser Ala Val Thr Gly Gly Glu Ala Asn Leu Leu Ser Ala Glu Pro  
                  50                 55                 60

Ala Gly Thr Phe Leu Ile Arg Asp Ser Ser Asp Gln Arg His Phe Phe  
        65                 70                 75                 80

Thr Leu Ser Val Lys Thr Gln Ser Gly Thr Lys Asn Leu Arg Ile Gln  
        85                 90                 95

Cys Glu Gly Gly Ser Phe Ser Leu Gln Ser Asp Pro Arg Ser Thr Gln  
        100                105                 110

Pro Val Pro Arg Phe Asp Cys Val Leu Lys Leu Val His His Tyr Met  
        115                120                 125

Pro Pro Pro Gly Thr Pro Ser Phe Ser Leu Pro Pro Thr Glu Pro Ser  
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Ser Glu Val Pro Glu Gln Pro Pro Ala Gln Ala Leu Pro Gly Ser Thr  
        145                150                 155                 160

Pro Lys Arg Ala Tyr Tyr Ile Tyr Ser Gly Gly Glu Lys Ile Pro Leu  
        165                170                 175

Val Leu Ser Arg Pro Leu Ser Ser Asn Val Ala Thr Leu Gln His Leu  
        180                185                 190

Cys Arg Lys Thr Val Asn Gly His Leu Asp Ser Tyr Glu Lys Val Thr  
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Leu  
 225

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Pro Val Gly Thr Phe Leu Val Arg Asp Ser Arg Gln Arg Asn Cys Phe  
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Phe Ala Leu Ser Val Lys Met Ala Ser Gly Pro Thr Ser Ile Arg Val  
115 120 125

His Phe Gln Ala Gly Arg Phe His Leu Asp Gly Ser Arg Glu Ser Phe  
130 135 140

Asp Cys Leu Phe Glu Leu Leu Glu His Tyr Val Ala Ala Pro Arg Arg  
145 150 155 160

Met Leu Gly Ala Pro Leu Arg Gln Arg Arg Val Arg Pro Leu Gln Glu  
165 170 175

Leu Cys Arg Gln Arg Ile Val Ala Thr Val Gly Arg Glu Asn Leu Ala  
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<212> DNA

<213> Rattus norvegicus

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<213> Rattus norvegicus

<400> 12

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Ser	Glu	Pro	Arg	Arg	Arg	Pro	Glu	Pro	Ser						
			20				25								30
Ser	Pro	Ala	Ala	Pro	Ala	Arg	Pro	Arg	Pro	Cys	Pro	Val	Val	Pro	Ala
				35			40					45			
Pro	Ala	Pro	Gly	Asp	Thr	His	Phe	Arg	Thr	Phe	Arg	Ser	His	Ser	Asp
				50			55				60				
Tyr	Arg	Arg	Ile	Thr	Arg	Thr	Ser	Ala	Leu	Leu	Asp	Ala	Cys	Gly	Phe
					65		70			75					80
Tyr	Trp	Gly	Pro	Leu	Ser	Val	His	Gly	Ala	His	Glu	Arg	Leu	Arg	Ser
					85			90				95			
Glu	Pro	Val	Gly	Thr	Phe	Leu	Val	Arg	Asp	Ser	Arg	Gln	Arg	Asn	Cys
					100			105				110			
Phe	Phe	Ala	Leu	Ser	Val	Lys	Met	Ala	Ser	Gly	Pro	Thr	Ser	Ile	Arg
					115			120				125			
Val	His	Phe	Gln	Ala	Gly	Arg	Phe	His	Leu	Asp	Gly	Asn	Arg	Glu	Thr
						130		135				140			
Phe	Asp	Cys	Leu	Phe	Glu	Leu	Leu	Glu	His	Tyr	Val	Ala	Ala	Pro	Arg
						145		150			155				160
Arg	Met	Leu	Gly	Ala	Pro	Leu	Arg	Gln	Arg	Arg	Val	Arg	Pro	Leu	Gln
						165			170				175		
Glu	Leu	Cys	Arg	Gln	Arg	Ile	Val	Ala	Ala	Val	Gly	Arg	Glu	Asn	Leu
						180			185				190		
Ala	Arg	Ile	Pro	Leu	Asn	Pro	Val	Leu	Arg	Asp	Tyr	Leu	Ser	Ser	Phe
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Pro Phe Gln Ile  
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<210> 13

<211> 1611

<212> DNA

<213> Mus musculus

<220>

<221> CDS

<222> (263)..(1525)

<400> 13

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gccgcagcgg ccccccgcgc tctctctgca gtctccacac ccgggagagc ctgagccgc 180

gtcacgcccc tcagcccccg ctgagtcctt tctctgttgc cgctccgaa tcgagttccc 240

ggaatcagac ggtgccccat ag atg gcc agc ttt ccc ccg agg gtt aac gag 292

Met Ala Ser Phe Pro Pro Arg Val Asn Glu

1

5

10

aaa gag atc gtg aga tca cgt act ata ggg gaa ctc ttg gct cca gca 340

Lys Glu Ile Val Arg Ser Arg Thr Ile Gly Glu Leu Leu Ala Pro Ala

15

20

25

gct cct ttt gac aag aaa tgt ggt gag aac tgg acg gtt gct ttt 388

Ala Pro Phe Asp Lys Lys Cys Gly Gly Glu Asn Trp Thr Val Ala Phe

30

35

40

gct cct gat ggt tcc tac ttt gcg tgg tca caa gga tat cgc ata gtg 436

Ala Pro Asp Gly Ser Tyr Phe Ala Trp Ser Gln Gly Tyr Arg Ile Val

45

50

55

aag ctt gtc ccg tgg tcc cag tgc cgt aag aac ttt ctt ttg cat ggt 484

Lys Leu Val Pro Trp Ser Gln Cys Arg Lys Asn Phe Leu Leu His Gly

60

65

70

tcc aaa aat gtt acc aat tca agc tgt cta aaa ttg gca aga caa aac 532

Ser Lys Asn Val Thr Asn Ser Ser Cys Leu Lys Leu Ala Arg Gln Asn

75

80

85

90

agt aat ggt ggt cag aaa aac aag cct cct gag cac gtt ata gac tgt 580

Ser Asn Gly Gly Gln Lys Asn Lys Pro Pro Glu His Val Ile Asp Cys

95

100

105

gga gac ata gtc tgg agt ctt gct ttt ggg tct tca gtt cca gaa aaa 628

Gly Asp Ile Val Trp Ser Leu Ala Phe Gly Ser Ser Val Pro Glu Lys

110

115

120

cag agt cgt tgc gtt aat ata gaa tgg cat cgg ttc cga ttt gga cag 676

Gln Ser Arg Cys Val Asn Ile Glu Trp His Arg Phe Arg Phe Gly Gln			
125	130	135	
gat cag cta ctc ctt gcc aca gga tta aac aat ggt cgc atc aaa atc			724
Asp Gln Leu Leu Leu Ala Thr Gly Leu Asn Asn Gly Arg Ile Lys Ile			
140	145	150	
tgg gat gta tat aca gga aaa ctc ctc ctt aat ttg gta gac cac att			772
Trp Asp Val Tyr Thr Gly Lys Leu Leu Asn Leu Val Asp His Ile			
155	160	165	170
gaa atg gtt aga gat tta act ttt gct cca gat ggg agc tta ctc ctt			820
Glu Met Val Arg Asp Leu Thr Phe Ala Pro Asp Gly Ser Leu Leu			
175	180	185	
gta tca gct tca aga gac aaa act cta aga gtg tgg gac ctg aaa gat			868
Val Ser Ala Ser Arg Asp Lys Thr Leu Arg Val Trp Asp Leu Lys Asp			
190	195	200	
gat gga aac atg gtg aaa gta ttg cgg gca cat cag aat tgg gtg tac			916
Asp Gly Asn Met Val Lys Val Leu Arg Ala His Gln Asn Trp Val Tyr			
205	210	215	
agt tgt gca ttc tct ccc gac tgt tct atg ctg tgt tca gtg ggc gcc			964
Ser Cys Ala Phe Ser Pro Asp Cys Ser Met Leu Cys Ser Val Gly Ala			
220	225	230	
agt aaa gca gtt ttc ctt tgg aat atg gat aaa tac acc atg att agg			1012
Ser Lys Ala Val Phe Leu Trp Asn Met Asp Lys Tyr Thr Met Ile Arg			
235	240	245	250
aag ctg gaa ggt cat cac cat gat gtt gta gct tgt gac ttt tct cct			1060
Lys Leu Glu Gly His His Asp Val Val Ala Cys Asp Phe Ser Pro			
255	260	265	
gat gga gca ttg cta gct act gca tcc tat gac act cgt gtg tat gtc			1108
Asp Gly Ala Leu Leu Ala Thr Ala Ser Tyr Asp Thr Arg Val Tyr Val			
270	275	280	
tgg gat cca cac aat gga gac ctt ctg atg gag ttt ggg cac ctg ttt			1156
Trp Asp Pro His Asn Gly Asp Leu Leu Met Glu Phe Gly His Leu Phe			
285	290	295	
ccc tcg ccc act cca ata ttt gct gga gga gca aat gac cga tgg gtg			1204
Pro Ser Pro Thr Pro Ile Phe Ala Gly Gly Ala Asn Asp Arg Trp Val			
300	305	310	
aga gct gtg tct ttc agt cat gat gga ctg cat gtt gcc agc ctt gct			1252
Arg Ala Val Ser Phe Ser His Asp Gly Leu His Val Ala Ser Leu Ala			
315	320	325	330
gat gat aaa atg gtg agg ttc tgg aga atc gat gag gat tgt ccg gta			1300
Asp Asp Lys Met Val Arg Phe Trp Arg Ile Asp Glu Asp Cys Pro Val			
335	340	345	
caa gtt gca cct ttg agc aat ggt ctt tgc tgt gcc ttt tct act gat			1348

Gln	Val	Ala	Pro	Leu	Ser	Asn	Gly	Leu	Cys	Cys	Ala	Phe	Ser	Thr	Asp	
350								355					360			
ggc	agt	gtt	tta	gct	gct	ggg	aca	cat	gat	gga	agt	gtg	tat	ttt	tgg	1396
Gly	Ser	Val	Leu	Ala	Ala	Gly	Thr	His	Asp	Gly	Ser	Val	Tyr	Phe	Trp	
365							370					375				
gcc	act	cca	agg	caa	gtc	cct	agc	ctt	caa	cat	ata	tgt	cgc	atg	tca	1444
Ala	Thr	Pro	Arg	Gln	Val	Pro	Ser	Leu	Gln	His	Ile	Cys	Arg	Met	Ser	
380							385				390					
atc	cga	aga	gtg	atg	tcc	acc	caa	gaa	gtc	caa	aaa	ctg	cct	gtt	cct	1492
Ile	Arg	Arg	Val	Met	Ser	Thr	Gln	Glu	Val	Gln	Lys	Leu	Pro	Val	Pro	
395						400				405			410			
tcc	aaa	ata	ttg	gcg	ttt	ctc	tcc	tac	cgc	ggt	tag	a	ctgaagactg		1539	
Ser	Lys	Ile	Leu	Ala	Phe	Leu	Ser	Tyr	Arg	Gly						
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tcgtgccgaa	tt															1611
<210> 14																
<211> 421																
<212> PRT																
<213> Mus musculus																
<400> 14																
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					20				25				30			
Cys	Gly	Gly	Glu	Asn	Trp	Thr	Val	Ala	Phe	Ala	Pro	Asp	Gly	Ser	Tyr	
					35				40				45			
Phe	Ala	Trp	Ser	Gln	Gly	Tyr	Arg	Ile	Val	Lys	Leu	Val	Pro	Trp	Ser	
					50				55				60			
Gln	Cys	Arg	Lys	Asn	Phe	Leu	Leu	His	Gly	Ser	Lys	Asn	Val	Thr	Asn	
					65				70			75		80		
Ser	Ser	Cys	Leu	Lys	Leu	Ala	Arg	Gln	Asn	Ser	Asn	Gly	Gly	Gln	Lys	
					85				90				95			
Asn	Lys	Pro	Pro	Glu	His	Val	Ile	Asp	Cys	Gly	Asp	Ile	Val	Trp	Ser	
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Leu	Ala	Phe	Gly	Ser	Ser	Val	Pro	Glu	Lys	Gln	Ser	Arg	Cys	Val	Asn	
					115				120				125			
Ile	Glu	Trp	His	Arg	Phe	Arg	Phe	Gly	Gln	Asp	Gln	Leu	Leu	Leu	Ala	
					130				135				140			

Thr Gly Leu Asn Asn Gly Arg Ile Lys Ile Trp Asp Val Tyr Thr Gly  
145 150 155 160

Lys Leu Leu Leu Asn Leu Val Asp His Ile Glu Met Val Arg Asp Leu  
165 170 175

Thr Phe Ala Pro Asp Gly Ser Leu Leu Leu Val Ser Ala Ser Arg Asp  
180 185 190

Lys Thr Leu Arg Val Trp Asp Leu Lys Asp Asp Gly Asn Met Val Lys  
195 200 205

Val Leu Arg Ala His Gln Asn Trp Val Tyr Ser Cys Ala Phe Ser Pro  
210 215 220

Asp Cys Ser Met Leu Cys Ser Val Gly Ala Ser Lys Ala Val Phe Leu  
225 230 235 240

Trp Asn Met Asp Lys Tyr Thr Met Ile Arg Lys Leu Glu Gly His His  
245 250 255

His Asp Val Val Ala Cys Asp Phe Ser Pro Asp Gly Ala Leu Leu Ala  
260 265 270

Thr Ala Ser Tyr Asp Thr Arg Val Tyr Val Trp Asp Pro His Asn Gly  
275 280 285

Asp Leu Leu Met Glu Phe Gly His Leu Phe Pro Ser Pro Thr Pro Ile  
290 295 300

Phe Ala Gly Gly Ala Asn Asp Arg Trp Val Arg Ala Val Ser Phe Ser  
305 310 315 320

His Asp Gly Leu His Val Ala Ser Leu Ala Asp Asp Lys Met Val Arg  
325 330 335

Phe Trp Arg Ile Asp Glu Asp Cys Pro Val Gln Val Ala Pro Leu Ser  
340 345 350

Asn Gly Leu Cys Cys Ala Phe Ser Thr Asp Gly Ser Val Leu Ala Ala  
355 360 365

Gly Thr His Asp Gly Ser Val Tyr Phe Trp Ala Thr Pro Arg Gln Val  
370 375 380

Pro Ser Leu Gln His Ile Cys Arg Met Ser Ile Arg Arg Val Met Ser  
385 390 395 400

Thr Gln Glu Val Gln Lys Leu Pro Val Pro Ser Lys Ile Leu Ala Phe  
405 410 415

Leu Ser Tyr Arg Gly  
420

<210> 15

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<212> DNA  
<213> Homo sapiens

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ccccggccgt ctccctctgtc cctggggcccg ggagacaaac ttggcgtcac gccctcagcg 180  
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catagatggc cagcttccc ccgagggtca acgagaaaaga gatcgtgaga tcacgtacta 300  
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ccaattcaag cagtttaaga ttgccaagac aaaatagtga tggggcgtcag aaaaataaagc 540  
ctcgtgacat attatagact gtggagatat agtctggagt cttgttttg ggtcatcagt 600  
tccagaaaaa cagagtcgct gtgtaaatat agaatggcat cgcttcagat ttggacaaga 660  
tcagctactt cttgctacag ggttgaacaa tggggcgtatc aaaatatggg atgtatatca 720  
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cag 783

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<211> 1122  
<212> DNA  
<213> Homo sapiens

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tgactttctt cctgatggag cattactggc tactgcattt tatgatactc gagtatata 180  
ctgggatcca cataatggag acattctgat ggaatttggg cacctgtttc ccccacctac 240  
tccaatattt gctggaggag caaatgaccg gtgggtacga tctgtatctt ttagccatga 300  
tggactgcattt gttcaagcc ttgctgatga taaaatggc aggttctggc gaattgtatga 360  
ggattatcca gtgcaagttt caccttgag caatggtctt tgctgtgcct tctctactga 420  
tggcagtgtt ttagctgctg ggacacatga cggaaagtgtg tattttggg ccactccacg 480

gcaggtccct agcctgcaac atttatgtcg catgtcaatc cgaagagtga tgcccaccca 540  
agaagttcag gagctgccga ttccttccaa gctttggag tttctctcgatcgtattta 600  
gaagattctg ccttccctag tagtagggac tgacagaata cacttaaacac aaacctcaag 660  
ctttactgac ttcaattatc tgttttaaa gacgtagaag atttatttaa tttgatatgt 720  
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tttctgaaca tatcaaataat aaattttttt aaagatctaa ctgtgaaaac atacataacct 840  
gtacatattt agatataagc tgctatatgt tgaatggacc ctttgcttt tctgattttt 900  
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caaggaaatt taaaattctg ggacactgag ttagatggta aatactgact tacgaaagtt 1020  
gaattgggtg aggcccccaa atcacctgag gtcagcagtt tgagactagc ctggcaaaca 1080  
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<210> 17  
<211> 2544  
<212> DNA  
<213> Mus musculus

<220>  
<221> UNSURE  
<222> (320)  
<223> Xaa is unsure

<220>  
<221> UNSURE  
<222> (451)  
<223> Xaa is unsure

<220>  
<221> CDS  
<222> (423)..(2030)

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tccttgctg gccgcaggtg ccctggatga ggccgcgcgc cgtgtcccg ccgcgtgagtg 180  
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gccctcgggc cgggatggat ccgcgggaa gaggaagaca agccggggcg ttgagccct 360  
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ca atg gat aaa gtg ggg aaa atg tgg aac aac tta aaa tac aga tgc		467
Met Asp Lys Val Gly Lys Met Trp Asn Asn Leu Lys Tyr Arg Cys		
1 5 10 15		
cag aat ctc ttc agc cac gag gga gga agc cgt aat gag aac gtg gag		515
Gln Asn Leu Phe Ser His Glu Gly Gly Ser Arg Asn Glu Asn Val Glu		
20 25 30		
atg aac ccc aac aga tgt ccg tct gtc aaa gag aaa agc atc agt ctg		563
Met Asn Pro Asn Arg Cys Pro Ser Val Lys Glu Lys Ser Ile Ser Leu		
35 40 45		
gga gag gca gct ccc cag caa gag agc agt ccc tta aga gaa aat gtt		611
Gly Glu Ala Ala Pro Gln Gln Glu Ser Ser Pro Leu Arg Glu Asn Val		
50 55 60		
gcc tta cag ctg gga ctg agc cct tcc aag acc ttt tcc agg cgg aac		659
Ala Leu Gln Leu Gly Leu Ser Pro Ser Lys Thr Phe Ser Arg Arg Asn		
65 70 75		
caa aac tgt gcc gca gag atc cct caa gtg gtt gaa atc agc atc gag		707
Gln Asn Cys Ala Ala Glu Ile Pro Gln Val Val Glu Ile Ser Ile Glu		
80 85 90 95		
aaa gac agt gac tcg ggt gcc acc cca gga acg agg ctt gca cgg aga		755
Lys Asp Ser Asp Ser Gly Ala Thr Pro Gly Thr Arg Leu Ala Arg Arg		
100 105 110		
gac tcc tac tcg cgg cac gcc ccg tgg gga gga aag aag aaa cat tcc		803
Asp Ser Tyr Ser Arg His Ala Pro Trp Gly Gly Lys Lys Lys His Ser		
115 120 125		
tgt tcc aca aag acc cag agt tca ttg gat acc gag aaa aag ttt ggt		851
Cys Ser Thr Lys Thr Gln Ser Ser Leu Asp Thr Glu Lys Lys Phe Gly		
130 135 140		
aga act cga agc ggc ctt cag agg cga gag cgg cgc tat gga gtc agc		899
Arg Thr Arg Ser Gly Leu Gln Arg Arg Glu Arg Arg Tyr Gly Val Ser		
145 150 155		
tcc atg cag gac atg gac agc gtt tct agc cgc gcg gtc ggg agc cgc		947
Ser Met Gln Asp Met Asp Ser Val Ser Ser Arg Ala Val Gly Ser Arg		
160 165 170 175		
tcc ctg agg cag agg ctc cag gac acg gtg ggt ttg tgt ttt ccc atg		995
Ser Leu Arg Gln Arg Leu Gln Asp Thr Val Gly Leu Cys Phe Pro Met		
180 185 190		
aga act tac agc aag cag tca aag cca ctc ttt tcc aat aaa aga aaa		1043
Arg Thr Tyr Ser Lys Gln Ser Lys Pro Leu Phe Ser Asn Lys Arg Lys		
195 200 205		
ata cat ctt tct gaa tta atg ctg gag aaa tgc cct ttt cct gct ggc		1091
Ile His Leu Ser Glu Leu Met Leu Glu Lys Cys Pro Phe Pro Ala Gly		
210 215 220		

tcg gat tta gca caa aag tgg cat ttg att aaa cag cat acc gcc cct		1139	
Ser Asp Leu Ala Gln Lys Trp His Leu Ile Lys Gln His Thr Ala Pro			
225	230	235	
gtg agc cca cac tca aca ttt ttt gat aca ttt gat cca tca ctg gtg		1187	
Val Ser Pro His Ser Thr Phe Phe Asp Thr Phe Asp Pro Ser Leu Val			
240	245	250	255
tct aca gaa gat gaa gaa gat agg ctt cgc gag aga aga cgg ctt agt		1235	
Ser Thr Glu Asp Glu Glu Asp Arg Leu Arg Glu Arg Arg Arg Leu Ser			
260	265	270	
atc gaa gaa ggg gtg gat ccc cct ccc aac gca caa ata cac acc ttt		1283	
Ile Glu Glu Gly Val Asp Pro Pro Asn Ala Gln Ile His Thr Phe			
275	280	285	
gaa gct act gca cag gtc aac cca ttg tat aag ctg gga cca aag tta		1331	
Glu Ala Thr Ala Gln Val Asn Pro Leu Tyr Lys Leu Gly Pro Lys Leu			
290	295	300	
gct cct ggg atg aca gag ata agt gga gat ggt tct gca att cca caa		1379	
Ala Pro Gly Met Thr Glu Ile Ser Gly Asp Gly Ser Ala Ile Pro Gln			
305	310	315	
gcs aat tgt gac tca gaa gag gat tca acc acc cta tgt ctg cag tca		1427	
Xaa Asn Cys Asp Ser Glu Glu Asp Ser Thr Thr Leu Cys Leu Gln Ser			
320	325	330	335
cgg agg cag aag cag cgc cag gtg tcc ggg gac agc cac gcg cac gtt		1475	
Arg Arg Gln Lys Gln Arg Gln Val Ser Gly Asp Ser His Ala His Val			
340	345	350	
agc aga cag gga gct tgg aaa gtt cat acg cag atc gat tac ata cac		1523	
Ser Arg Gln Gly Ala Trp Lys Val His Thr Gln Ile Asp Tyr Ile His			
355	360	365	
tgc ctc gtg cca gat ttg ctt cag atc aca ggg aat ccc tgt tac tgg		1571	
Cys Leu Val Pro Asp Leu Leu Gln Ile Thr Gly Asn Pro Cys Tyr Trp			
370	375	380	
ggc gtg atg gac cga tac gag gcc gaa gcc ctt cta gaa ggg aaa ccg		1619	
Gly Val Met Asp Arg Tyr Glu Ala Glu Ala Leu Leu Glu Gly Lys Pro			
385	390	395	
gaa ggc acg ttc ttg ctc agg gac tct gca cag gag gac tac ctc ttc		1667	
Glu Gly Thr Phe Leu Leu Arg Asp Ser Ala Gln Glu Asp Tyr Leu Phe			
400	405	410	415
tct gtg agc ttc cgc cgc tac aac agg tct ctg cac gcc cgg atc gag		1715	
Ser Val Ser Phe Arg Arg Tyr Asn Arg Ser Leu His Ala Arg Ile Glu			
420	425	430	
cag tgg aac cac aac ttc agc ttc gat gcc cat gac ccc tgc gtg ttt		1763	
Gln Trp Asn His Asn Phe Ser Phe Asp Ala His Asp Pro Cys Val Phe			
435	440	445	

cac tcc tcc acw gtc acg ggg ctt ctc gaa cac tat aaa gac ccc agc	1811
His Ser Ser Xaa Val Thr Gly Leu Leu Glu His Tyr Lys Asp Pro Ser	
450 455 460	
tct tgc atg ttt ttt gaa ccg ttg cta acg ata tca ctg aat aga act	1859
Ser Cys Met Phe Phe Glu Pro Leu Leu Thr Ile Ser Leu Asn Arg Thr	
465 470 475	
ttc cct ttc agc ctg cag tat atc tgc cgc gca gtg atc tgc aga tgc	1907
Phe Pro Phe Ser Leu Gln Tyr Ile Cys Arg Ala Val Ile Cys Arg Cys	
480 485 490 495	
act acg tat gat ggg att gac ggg ctc ccg cta ccg tcg atg tta cag	1955
Thr Thr Tyr Asp Gly Ile Asp Gly Leu Pro Leu Pro Ser Met Leu Gln	
500 505 510	
gat ttt tta aaa gag tat cat tat aaa caa aaa gtt agg gtt cgc tgg	2003
Asp Phe Leu Lys Glu Tyr His Tyr Lys Gln Lys Val Arg Val Arg Trp	
515 520 525	
tta gaa cga gar cca gtc aaa gca aag taactcctgt ccccaaaggg	2050
Leu Glu Arg Xaa Pro Val Lys Ala Lys	
530 535	
cactaactaa gtctgctcct cccgtgcac mqaactgcac ccatagrag gcagtcaagct	2110
gctaggattt cccacccaga atggagctt agtcatttagc ctctgcccta tggggtccgc	2170
tgttcctcag acaaagggtgc cttagggacag caagatggct tgcaagggtt cggggcgt	2230
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gaacaaatta ttaatattgg atgggtattt caatagtgt actaatgttt gaaattattt	2350
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caagcttga aagttcaaaa caaacaagtt aaataaaaga ctaccttcct tttagagaaaa	2470
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<223> Xaa is unsure

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<223> Xaa is unsure

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35 40 45

Glu Ala Ala Pro Gln Gln Glu Ser Ser Pro Leu Arg Glu Asn Val Ala  
50 55 60

Leu Gln Leu Gly Leu Ser Pro Ser Lys Thr Phe Ser Arg Arg Asn Gln  
65 70 75 80

Asn Cys Ala Ala Glu Ile Pro Gln Val Val Glu Ile Ser Ile Glu Lys  
85 90 95

Asp Ser Asp Ser Gly Ala Thr Pro Gly Thr Arg Leu Ala Arg Arg Asp  
100 105 110

Ser Tyr Ser Arg His Ala Pro Trp Gly Gly Lys Lys Lys His Ser Cys  
115 120 125

Ser Thr Lys Thr Gln Ser Ser Leu Asp Thr Glu Lys Lys Phe Gly Arg  
130 135 140

Thr Arg Ser Gly Leu Gln Arg Arg Glu Arg Arg Tyr Gly Val Ser Ser  
145 150 155 160

Met Gln Asp Met Asp Ser Val Ser Ser Arg Ala Val Gly Ser Arg Ser  
165 170 175

Leu Arg Gln Arg Leu Gln Asp Thr Val Gly Leu Cys Phe Pro Met Arg  
180 185 190

Thr Tyr Ser Lys Gln Ser Lys Pro Leu Phe Ser Asn Lys Arg Lys Ile  
195 200 205

His Leu Ser Glu Leu Met Leu Glu Lys Cys Pro Phe Pro Ala Gly Ser  
210 215 220

Asp Leu Ala Gln Lys Trp His Leu Ile Lys Gln His Thr Ala Pro Val  
225 230 235 240

Ser Pro His Ser Thr Phe Phe Asp Thr Phe Asp Pro Ser Leu Val Ser  
245 250 255

Thr Glu Asp Glu Glu Asp Arg Leu Arg Glu Arg Arg Arg Leu Ser Ile  
 260 265 270  
 Glu Glu Gly Val Asp Pro Pro Asn Ala Gln Ile His Thr Phe Glu  
 275 280 285  
 Ala Thr Ala Gln Val Asn Pro Leu Tyr Lys Leu Gly Pro Lys Leu Ala  
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 Pro Gly Met Thr Glu Ile Ser Gly Asp Gly Ser Ala Ile Pro Gln Xaa  
 305 310 315 320  
 Asn Cys Asp Ser Glu Glu Asp Ser Thr Thr Leu Cys Leu Gln Ser Arg  
 325 330 335  
 Arg Gln Lys Gln Arg Gln Val Ser Gly Asp Ser His Ala His Val Ser  
 340 345 350  
 Arg Gln Gly Ala Trp Lys Val His Thr Gln Ile Asp Tyr Ile His Cys  
 355 360 365  
 Leu Val Pro Asp Leu Leu Gln Ile Thr Gly Asn Pro Cys Tyr Trp Gly  
 370 375 380  
 Val Met Asp Arg Tyr Glu Ala Glu Ala Leu Leu Glu Gly Lys Pro Glu  
 385 390 395 400  
 Gly Thr Phe Leu Leu Arg Asp Ser Ala Gln Glu Asp Tyr Leu Phe Ser  
 405 410 415  
 Val Ser Phe Arg Arg Tyr Asn Arg Ser Leu His Ala Arg Ile Glu Gln  
 420 425 430  
 Trp Asn His Asn Phe Ser Phe Asp Ala His Asp Pro Cys Val Phe His  
 435 440 445  
 Ser Ser Xaa Val Thr Gly Leu Leu Glu His Tyr Lys Asp Pro Ser Ser  
 450 455 460  
 Cys Met Phe Phe Glu Pro Leu Leu Thr Ile Ser Leu Asn Arg Thr Phe  
 465 470 475 480  
 Pro Phe Ser Leu Gln Tyr Ile Cys Arg Ala Val Ile Cys Arg Cys Thr  
 485 490 495  
 Thr Tyr Asp Gly Ile Asp Gly Leu Pro Leu Pro Ser Met Leu Gln Asp  
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 Glu Arg Xaa Pro Val Lys Ala Lys  
 530 535

<211> 1221  
<212> DNA  
<213> Homo sapiens

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gaagaagggg ttgatcccc tcccaatgca caaatacata catttgaagc tactgcacag 180  
gttaatccat tattaaactg ggacaaaaat tagtcctgg aatgactgaa ataagtgggg 240  
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gcagtcacgg aggcagaagc agcgtcagat atctggagac agccataaccc atgttagcag 360  
acagggagct tggaaagtcc acacacagat tgattacata cactgcttcg tgcctgattt 420  
gcttcaaatt acagggaaatc cctgttactg gggagtgtatg gaccgttatg aagcagaagc 480  
ccttctcgaa gggaaacctg aaggcacgtt tttgctcagg gactctgcgc aagaggacta 540  
cttcttctct gtgagcttcc gccgatacaa cagatccctg catgcccgaa ttgagcagt 600  
gaatcacaac tttagttcg acgcccattga cccgtgtta tttcactcct ccactgtaac 660  
gggactttta gaacattata aagatcccag ttcgtgcatg tttttgaac cattgcttac 720  
tatatcacta aataggactt tcccttttag cctgcagtat atctgtcgcg cgtaatctg 780  
caggtgcact acgtatgtatg gaattgtatgg gtcctctta ccctcaatgt tacaggattt 840  
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tcagacagta cacctatagc aagcacacgt agcagtgtta ggcttttca tacagtatgt 1020  
aagcttagtg ttagtatctg tcagatgcta cctgctgtta cttattcaga taaacatgg 1080  
gcctattgga acaatagcgg atagagctac aggtgttcag taagactaca aaaacatttt 1140  
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ggcatttggta atgaagaaat g 1221

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<211> 2369  
<212> DNA  
<213> Mus musculus

<220>  
<221> CDS  
<222> (116)..(1327)

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 Met  
 1  
 gag gcc gga gag gag ccg ctg ctg gct gaa ctc aag cct ggg cgc 166  
 Glu Ala Gly Glu Glu Pro Leu Leu Ala Glu Leu Lys Pro Gly Arg  
 5 10 15  
 ccc cac cag ttc gac tgg aag tca agc tgc gag acc tgg agc gtg gcc 214  
 Pro His Gln Phe Asp Trp Lys Ser Ser Cys Glu Thr Trp Ser Val Ala  
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 ttc tcg cca gac ggt tcc tgg ttc gcc tgg tct caa gga cac tgc gtg 262  
 Phe Ser Pro Asp Gly Ser Trp Phe Ala Trp Ser Gln Gly His Cys Val  
 35 40 45  
 gtc aag ctg gtc ccc tgg ccc tta gag gaa cag ttc atc cct aaa gga 310  
 Val Lys Leu Val Pro Trp Pro Leu Glu Glu Gln Phe Ile Pro Lys Gly  
 50 55 60 65  
 ttc gaa gcc aag agc cga agc agc aag aat gac cca aaa gga cgg ggc 358  
 Phe Glu Ala Lys Ser Arg Ser Ser Lys Asn Asp Pro Lys Gly Arg Gly  
 70 75 80  
 agt ctg aag gag aag acg ctg gac tgt ggc cag att gtg tgg ggg ctg 406  
 Ser Leu Lys Glu Lys Thr Leu Asp Cys Gly Gln Ile Val Trp Gly Leu  
 85 90 95  
 gcc ttc agc ccg tgg ccc tct cca ccc agc agg aaa ctc tgg gca cgt 454  
 Ala Phe Ser Pro Trp Pro Ser Pro Pro Ser Arg Lys Leu Trp Ala Arg  
 100 105 110  
 cac cat ccc cag gcg cct gat gtt tct tgc atc ctg gcc aca ggt 502  
 His His Pro Gln Ala Pro Asp Val Ser Cys Leu Ile Leu Ala Thr Gly  
 115 120 125  
 ctc aac gat ggg cag atc aag att tgg gag gta cag aca ggc ctc ctg 550  
 Leu Asn Asp Gly Gln Ile Lys Ile Trp Glu Val Gln Thr Gly Leu Leu  
 130 135 140 145  
 ctt ctg aat ctt tct ggc cac caa gac gtc gtg aga gat ctg agc ttc 598  
 Leu Leu Asn Leu Ser Gly His Gln Asp Val Val Arg Asp Leu Ser Phe  
 150 155 160  
 acg ccc agc ggc agt ttg att ttg gtc tct gca tcc cgg gat aag aca 646  
 Thr Pro Ser Gly Ser Leu Ile Leu Val Ser Ala Ser Arg Asp Lys Thr  
 165 170 175  
 ctt cga att tgg gac ctg aat aaa cac ggt aag cag atc cag gtg tta 694  
 Leu Arg Ile Trp Asp Leu Asn Lys His Gly Lys Gln Ile Gln Val Leu  
 180 185 190  
 tcc ggc cat ctg cag tgg gtt tac tgc tgc tcc atc tcc cct gac tgt 742

Ser	Gly	His	Leu	Gln	Trp	Val	Tyr	Cys	Cys	Ser	Ile	Ser	Pro	Asp	Cys	
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agc	atg	ctg	tgc	tct	gca	gct	ggg	gag	aag	tgc	gtc	ttt	ctg	tgg	agc	790
Ser	Met	Leu	Cys	Ser	Ala	Ala	Gly	Glu	Lys	Ser	Val	Phe	Leu	Trp	Ser	
210					215					220					225	
atg	cg	tcc	tac	aca	cta	atc	cgg	aaa	cta	gaa	ggc	cac	caa	agc	agt	838
Met	Arg	Ser	Tyr	Thr	Leu	Ile	Arg	Lys	Leu	Glu	Gly	His	Gln	Ser	Ser	
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															240	
gtt	gtc	tcc	tgt	gat	ttc	tct	cat	gat	tca	gcc	ttg	ctt	gtc	aca	gct	886
Val	Val	Ser	Cys	Asp	Phe	Ser	Pro	Asp	Ser	Ala	Leu	Leu	Val	Thr	Ala	
															245	
															250	
															255	
tcg	tat	gac	acc	agt	gtg	att	atg	tgg	gac	ccc	tac	acc	ggc	gcg	agg	934
Ser	Tyr	Asp	Thr	Ser	Val	Ile	Met	Trp	Asp	Pro	Tyr	Thr	Gly	Ala	Arg	
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															265	
															270	
ctg	agg	tca	ctt	cat	cac	aca	caa	ctt	gaa	ccc	acc	atg	gat	gac	agt	982
Leu	Arg	Ser	Leu	His	His	Thr	Gln	Leu	Glu	Pro	Thr	Met	Asp	Asp	Ser	
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gac	gtc	cac	atg	tcc	ctg	agg	tcc	gtg	tgc	ttc	tca	cct	gaa	ggc		1030
Asp	Val	His	Met	Ser	Ser	Leu	Arg	Ser	Val	Cys	Phe	Ser	Pro	Glu	Gly	
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															300	
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Leu	Tyr	Leu	Ala	Thr	Val	Ala	Asp	Asp	Arg	Leu	Leu	Arg	Ile	Trp	Ala	
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															315	
															320	
ctg	gaa	ctg	aag	gct	ccg	gtt	gcc	ttt	gct	ccg	atg	acc	aat	ggt	ctt	1126
Leu	Glu	Leu	Lys	Ala	Pro	Val	Ala	Phe	Ala	Pro	Met	Thr	Asn	Gly	Leu	
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															330	
															335	
tgc	tgc	acg	ttc	tcc	cca	cac	ggt	gga	att	att	gcc	aca	ggg	acg	aga	1174
Cys	Cys	Thr	Phe	Phe	Pro	His	Gly	Gly	Ile	Ile	Ala	Thr	Gly	Thr	Arg	
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															345	
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gat	ggc	cat	gtc	cag	ttc	tgg	aca	gct	ccc	cg	gtc	ctg	tcc	tca	ctg	1222
Asp	Gly	His	Val	Gln	Phe	Trp	Thr	Ala	Pro	Arg	Val	Leu	Ser	Ser	Leu	
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															360	
															365	
aag	cac	tta	tgc	agg	aaa	gcc	ctc	cga	agt	ttc	ctg	aca	acg	tat	caa	1270
Lys	His	Leu	Cys	Arg	Lys	Ala	Leu	Arg	Ser	Phe	Leu	Thr	Thr	Tyr	Gln	
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															375	
															380	
															385	
gtc	cta	gca	ctg	cca	atc	ccc	aag	aag	atg	aaa	gag	ttc	ctc	aca	tac	1318
Val	Leu	Ala	Leu	Pro	Ile	Pro	Lys	Lys	Met	Lys	Glu	Phe	Leu	Thr	Tyr	
															390	
															395	
															400	
agg	act	ttc	tagcagtgc	ggctccccca	cctcctgc	cagc	1367									
Arg	Thr	Phe														

acaagggact ggcttaggatg gagtcaggca gctcacactg gaccagtgtg gacccctt 1427

cctccatgg catgtgcaag taggtctgcg tgaccccact tctgtggc cggccttacc 1487  
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<212> PRT  
<213> Mus musculus

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Ala Phe Ser Pro Asp Gly Ser Trp Phe Ala Trp Ser Gln Gly His Cys  
35 40 45  
Val Val Lys Leu Val Pro Trp Pro Leu Glu Glu Gln Phe Ile Pro Lys  
50 55 60  
Gly Phe Glu Ala Lys Ser Arg Ser Ser Lys Asn Asp Pro Lys Gly Arg  
65 70 75 80  
Gly Ser Leu Lys Glu Lys Thr Leu Asp Cys Gly Gln Ile Val Trp Gly  
85 90 95

Leu Ala Phe Ser Pro Trp Pro Ser Pro Pro Ser Arg Lys Leu Trp Ala  
 100 105 110  
 Arg His His Pro Gln Ala Pro Asp Val Ser Cys Leu Ile Leu Ala Thr  
 115 120 125  
 Gly Leu Asn Asp Gly Gln Ile Lys Ile Trp Glu Val Gln Thr Gly Leu  
 130 135 140  
 Leu Leu Leu Asn Leu Ser Gly His Gln Asp Val Val Arg Asp Leu Ser  
 145 150 155 160  
 Phe Thr Pro Ser Gly Ser Leu Ile Leu Val Ser Ala Ser Arg Asp Lys  
 165 170 175  
 Thr Leu Arg Ile Trp Asp Leu Asn Lys His Gly Lys Gln Ile Gln Val  
 180 185 190  
 Leu Ser Gly His Leu Gln Trp Val Tyr Cys Cys Ser Ile Ser Pro Asp  
 195 200 205  
 Cys Ser Met Leu Cys Ser Ala Ala Gly Glu Lys Ser Val Phe Leu Trp  
 210 215 220  
 Ser Met Arg Ser Tyr Thr Leu Ile Arg Lys Leu Glu Gly His Gln Ser  
 225 230 235 240  
 Ser Val Val Ser Cys Asp Phe Ser Pro Asp Ser Ala Leu Leu Val Thr  
 245 250 255  
 Ala Ser Tyr Asp Thr Ser Val Ile Met Trp Asp Pro Tyr Thr Gly Ala  
 260 265 270  
 Arg Leu Arg Ser Leu His His Thr Gln Leu Glu Pro Thr Met Asp Asp  
 275 280 285  
 Ser Asp Val His Met Ser Ser Leu Arg Ser Val Cys Phe Ser Pro Glu  
 290 295 300  
 Gly Leu Tyr Leu Ala Thr Val Ala Asp Asp Arg Leu Leu Arg Ile Trp  
 305 310 315 320  
 Ala Leu Glu Leu Lys Ala Pro Val Ala Phe Ala Pro Met Thr Asn Gly  
 325 330 335  
 Leu Cys Cys Thr Phe Pro His Gly Gly Ile Ile Ala Thr Gly Thr  
 340 345 350  
 Arg Asp Gly His Val Gln Phe Trp Thr Ala Pro Arg Val Leu Ser Ser  
 355 360 365  
 Leu Lys His Leu Cys Arg Lys Ala Leu Arg Ser Phe Leu Thr Thr Tyr  
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Tyr Arg Thr Phe

<210> 22  
<211> 1246  
<212> DNA  
<213> Homo sapiens

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cagcaggaag ctctggcac gccaccaccc ccaagtgccc gatgtcttgc gcctggttct 240  
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ggaataatgg gccaaacatc tggccttgca ttgaaatagc atttcttgg gattgtgaat 1200  
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<210> 23  
<211> 422  
<212> DNA  
<213> Homo sapiens

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tgaggtatta attagccta actaaattac aggggactca gaggccgtgc tcctgaccga 180  
tccagacact atttttttt tttttttt acaatggtgt gcatgtgcag gaaatgacaa 240  
atttgtatgt cagattatac aaggatgtat tcttaaaccg catgactatt cagatggcta 300  
ctgagttatc agtggccatt tattagcatc atatttattt gtatttctc aacagatgtt 360  
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<210> 24  
<211> 2019  
<212> DNA  
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<220>  
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<222> (1992)  
<223> N is unsure

<220>  
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<222> (2000)  
<223> N is unsure

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ggagcagttc tgtgaccatc cactggagca ctgtgacgat acaagactcc atgatgcagc 180  
ctatgttaggg gacctccaga ccctcagggaa cctactgcaa gaggagagct accggagccg 240  
catcaatgag aagtctgtct ggtgctgcgg ctggcttccc tgcacaccac tgaggatcgc 300  
agccactgca ggcattggga actgtgtgga cttcctcata cgcaaagggg ccgaggtgga 360  
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2019

<210> 25  
<211> 350  
<212> PRT  
<213> Mus musculus

<220>  
<221> UNSURE  
<222> (167)  
<223> Xaa is unsure

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35 40 45  
  
Glu His Cys Asp Asp Thr Arg Leu His Asp Ala Ala Tyr Val Gly Asp  
50 55 60  
  
Leu Gln Thr Leu Arg Asn Leu Leu Gln Glu Glu Ser Tyr Arg Ser Arg  
65 70 75 80  
  
Ile Asn Glu Lys Ser Val Trp Cys Cys Gly Trp Leu Pro Cys Thr Pro  
85 90 95  
  
Leu Arg Ile Ala Ala Thr Ala Gly His Gly Asn Cys Val Asp Phe Leu  
100 105 110  
  
Ile Arg Lys Gly Ala Glu Val Asp Leu Val Asp Val Lys Gly Gln Thr  
115 120 125  
  
Ala Leu Tyr Val Ala Val Val Asn Gly His Leu Glu Ser Thr Glu Ile  
130 135 140  
  
Leu Leu Glu Ala Gly Ala Asp Pro Asn Gly Ser Arg His His Arg Ser  
145 150 155 160  
  
Thr Pro Val Tyr His Ala Xaa Arg Val Gly Arg Asp Asp Ile Leu Lys  
165 170 175  
  
Ala Leu Ile Arg Tyr Gly Ala Asp Val Asp Val Asn His His Leu Asn  
180 185 190  
  
Ser Asp Thr Arg Pro Pro Phe Ser Arg Arg Leu Thr Ser Leu Val Val  
195 200 205  
  
Cys Pro Leu Tyr Ile Ser Ala Ala Tyr His Asn Leu Gln Cys Phe Arg  
210 215 220  
  
Leu Leu Leu Gln Ala Gly Ala Asn Pro Asp Phe Asn Cys Asn Gly Pro  
225 230 235 240  
  
Val Asn Thr Gln Glu Phe Tyr Arg Gly Ser Pro Gly Cys Val Met Asp  
245 250 255  
  
Ala Val Leu Arg His Gly Cys Glu Ala Ala Phe Val Ser Leu Leu Val  
260 265 270

Glu Phe Gly Ala Asn Leu Asn Leu Val Lys Trp Glu Ser Leu Gly Pro  
275 280 285

Glu Ala Arg Gly Arg Arg Lys Met Asp Pro Glu Ala Leu Gln Val Phe  
290 295 300

Lys Glu Ala Arg Ser Ile Pro Arg Thr Leu Leu Ser Leu Cys Arg Val  
305 310 315 320

Ala Val Arg Arg Ala Leu Gly Lys Tyr Arg Leu His Leu Val Pro Ser  
325 330 335

Leu Pro Leu Pro Asp Pro Ile Lys Lys Phe Leu Leu Tyr Glu  
340 345 350

<210> 26

<211> 419

<212> DNA

<213> Homo sapiens

<400> 26

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cgaggctcca ttagtcagct tacgtcgaaa acctccagac cctcaggagc ctattgcaag 180  
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gcacaccgtt gcaaatcgcg gccactgcag gccatgggag ctgtgtggac ttcctcatcc 300  
ggaagggggc cgagggtggat ctgggtggacg taaaaggaca gacggccctg tatgtggctg 360  
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<210> 27

<211> 595

<212> DNA

<213> Homo sapiens

<400> 27

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tcatctgatt cttcgctgc ctctgccaga ccccataaaag aagtttctac tccatgagta 180  
gactccaagt gctgcgggtt attccagtga gggagaaagt gatctgcagg gaggtggaca 240  
ccgagccctg agtgctgtgc tgctgctggc ctcctgatgg ctgttgctgc agaagatgtc 300  
ctcgttagact gtcattgctc ctcaggtgcc tggccgctg aacagtccctt gggcattgt 360  
cagctgagag gcttatacta aagttattat tgttttccc aagttctctg ttctggattt 420  
tcagttgcat attaatgtaa cggccatgg ggtatgtaca tgtagggct gaggtggag 480

gcctactaat ttcctgttagg gaagactccc agcacttctg gaactgtgct tcttttatt 540  
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 <212> DNA  
 <213> Mus musculus

<220>  
 <221> CDS  
 <222> (4)..(396)

<220>  
 <221> UNSURE  
 <222> (551)  
 <223> n is unsure

<220>  
 <221> UNSURE  
 <222> (651)  
 <223> n is unsure

<400> 28

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aca tcc gct gtc aat ccc caa agg atg ctg agg cca cca cca acc gct	96
Thr Ser Ala Val Asn Pro Gln Arg Met Leu Arg Pro Pro Pro Thr Ala	
20 25 30	

gtt ttc aac tgt gcc gct tgc tgc tgt ctg tgg ggg cag atg ctg atg	144
Val Phe Asn Cys Ala Ala Cys Cys Leu Trp Gly Gln Met Leu Met	
35 40 45	

aat aca tac cgt gta gtt cag ctt cct gag gag gcc aag ggc ttg gtg	192
Asn Thr Tyr Arg Val Val Gln Leu Pro Glu Glu Ala Lys Gly Leu Val	
50 55 60	

cca cca gag att cta cag aag tac cat gga ttc tac tct tcc ctc ttt	240
Pro Pro Glu Ile Leu Gln Lys Tyr His Gly Phe Tyr Ser Ser Leu Phe	
65 70 75	

gcc ttg gtg agg cag ccc agg tcg ctg cag cat ctc tgc cgt tgt gcg	288
Ala Leu Val Arg Gln Pro Arg Ser Leu Gln His Leu Cys Arg Cys Ala	
80 85 90 95	

ctc cgc agt cac ctg gag ggc tgt ctg ccc cat gca cta ccg cgc ctt	336
Leu Arg Ser His Leu Glu Gly Cys Leu Pro His Ala Leu Pro Arg Leu	
100 105 110	

ccc ctg cca ccg cgc atg ctc cgc ttt ctg cag ctg gac ttt gag gat	384
Pro Leu Pro Pro Arg Met Leu Arg Phe Leu Gln Leu Asp Phe Glu Asp	
115 120 125	

ctg ctc tac taggcttgc gcccgtgaa caaaggcagac cccacccca 433  
Leu Leu Tyr  
130

ccccaaaggc atctctcagc aatgaatgat gcaaggcggt ctgtcttcaa gtcaggagtg 493  
gacgccttga tccacacttg agagaagagg ccagatcagc accyggctgg tagtgatngc 553  
agagggcacc tgtgcagatc tgtgtgcgca ctggaaatct ctaggctgaa ggcyagagca 613  
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tagcaataacc gggtgctttt ctgcccggaaa gtgagttacc aaa 896

<210> 29  
<211> 130  
<212> PRT  
<213> Mus musculus

<400> 29  
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Phe Asn Cys Ala Ala Cys Cys Cys Leu Trp Gly Gln Met Leu Met Asn  
35 40 45  
Thr Tyr Arg Val Val Gln Leu Pro Glu Glu Ala Lys Gly Leu Val Pro  
50 55 60  
Pro Glu Ile Leu Gln Lys Tyr His Gly Phe Tyr Ser Ser Leu Phe Ala  
65 70 75 80  
Leu Val Arg Gln Pro Arg Ser Leu Gln His Leu Cys Arg Cys Ala Leu  
85 90 95  
Arg Ser His Leu Glu Gly Cys Leu Pro His Ala Leu Pro Arg Leu Pro  
100 105 110  
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Leu Tyr  
130

<210> 30

<211> 436  
<212> DNA  
<213> Mus musculus

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gtgttcctcc aggtggaggc tcaggtcccc gggtgagctg gggctgcagc gggactcagg 360  
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cacaccgttg actggt 436

<210> 31  
<211> 2180  
<212> DNA  
<213> Homo sapiens

<400> 31  
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tggaaaattag ttgacaatca agttcaccca agaaaatgtt gactaagcta aagaaatcac 180  
agataaaaaca ttttaccaaa aggataggtt acacacaaaa aaatgctatc acaggaagct 240  
atgatcatct aatatttctt taataataat tctagttcca taggtttca tgttatgcc 300  
atttgtaccc gagtttaatt acagaaaagg caacaatttc taaattggtg gtatacattt 360  
ctttacaatt tttaatgtt aggccattta ttaaaataga caaactagaa gatgaaaacg 420  
aaggcaacag aaaaattcaa ctttcacaa cccaaagaat tagcacaacc ttagaaataa 480  
tttagaaaaaa agtgttgtt aaagatatgt tgcagatctc cgttccattt cccaaagatta 540  
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atggaccatt taaaaggaca tggcaatttc cattctgtt agttcattt aacctttact 720  
taggggttga ttaccacatg aaatgtgctt ttaatgcata aaaatcacag tggatttagcc 780  
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ttctgcacat tgatgaaaca taattcacac ctctaaaacc tcaagacttc cctttttaa 900  
agaaccaaaa taaacccaag acacccgt gacacttccc cacccctaaa caaactgatg 960  
actctttac acataaaaact gaaatagtta tggcagcaaa agatttgat ggcaatgaaa 1020  
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cagacaatag ctccgtgatc cttccaaagg atacatcccc tcatctaaag gcacagtata 2040  
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<211> 2649  
<212> DNA  
<213> Mus musculus

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actggctcca gcatgactcg cttctttat gcagagtact ttgtctgtt tcactctggc 180  
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ttcccaaaa 2649

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<211> 495  
<212> DNA  
<213> Homo sapiens

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caaggatgcg atgaagagggc cttgaagacc atgatcaagg aaggaaagaa tctcgag 180  
cccaacaagg agggctggct gccgctgcac gaggccgcattt actatggcca ggtgggctgc 240  
ctgaaagtcc tgcagcgagc gtacccaggg accatcgacc agcgcaccct gcaggaggaa 300  
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gcaggggcag agcgggacat ctccaacaaa tcccagaga accgctctac aaagcctgtg 420  
agcgcaagaa cgccgaagcc gtgaagattc ttgggtgcagc acaacgcaga caccaacaac 480  
gctgcaaccg ggctg 495

<210> 34  
 <211> 709  
 <212> DNA  
 <213> Homo sapiens

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 aaagactaag atgaagacgt ggcccaaggt agggggtagg gggagcctgg gtcttgagg 660  
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<210> 35  
 <211> 848  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> (1)..(624)

<400> 35  
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 1 5 10 15

gag atg aag ctg aaa ggg aaa cca gat ggt tct ttc ctg gta cga gac 96  
 Glu Met Lys Leu Lys Gly Lys Pro Asp Gly Ser Phe Leu Val Arg Asp  
 20 25 30

agt tct gat cct cgt tac atc ctg agc ctc agt ttc cga tca cag ggt 144  
 Ser Ser Asp Pro Arg Tyr Ile Leu Ser Leu Ser Phe Arg Ser Gln Gly  
 35 40 45

atc acc cac cac act aga atg gag cac tac aga gga acc ttc agc ctg 192  
 Ile Thr His His Thr Arg Met Glu His Tyr Arg Gly Thr Phe Ser Leu  
 50 55 60

tgg tgt cat ccc aag ttt gag gac cgc tgt caa tct gtt gta gag ttt	240
Trp Cys His Pro Lys Phe Glu Asp Arg Cys Gln Ser Val Val Glu Phe	
65                   70                   75                   80	
att aag aga gcc att atg cac tcc aag aat gga aag ttt ctc tat ttc	288
Ile Lys Arg Ala Ile Met His Ser Lys Asn Gly Lys Phe Leu Tyr Phe	
85                   90                   95	
tta aga tcc agg gtt cca gga ctg cca cca act cct gtc cag ctg ctc	336
Leu Arg Ser Arg Val Pro Gly Leu Pro Pro Thr Pro Val Gln Leu Leu	
100                105                110	
tat cca gtg tcc cga ttc agc aat gtc aaa tcc ctc cag cac ctt tgc	384
Tyr Pro Val Ser Arg Phe Ser Asn Val Lys Ser Leu Gln His Leu Cys	
115                120                125	
aga ttc cgg ata cga cag ctc gtc agg ata gat cac atc cca gat ctc	432
Arg Phe Arg Ile Arg Gln Leu Val Arg Ile Asp His Ile Pro Asp Leu	
130                135                140	
cca ctg cct aaa cct ctg atc tct tat atc cga aag ttc tac tac tat	480
Pro Leu Pro Lys Pro Leu Ile Ser Tyr Ile Arg Lys Phe Tyr Tyr Tyr	
145                150                155                160	
gat cct cag gaa gag gta tac ctg tct cta aag gaa gcg cag cgt cag	528
Asp Pro Gln Glu Glu Val Tyr Leu Ser Leu Lys Glu Ala Gln Arg Gln	
165                170                175	
ttt cca aac aga agc aag agg tgg aac cct cca cgt agc gag ggg ctc	576
Phe Pro Asn Arg Ser Lys Arg Trp Asn Pro Pro Arg Ser Glu Gly Leu	
180                185                190	
cct gct ggt cac cac caa ggg cat ttg gtt gcc aag ctc cag ctt tga	624
Pro Ala Gly His His Gln Gly His Leu Val Ala Lys Leu Gln Leu	
195                200                205	
agaaccaaataaagctacca tgaaaagaag aggaaaagtg agggAACAGG aaggTTGGGA	684
ttctctgtgc agagactttg gttccccacg caagccctgg ggcttggaaag aagcacatga	744
ccgtactctg cgtggggctc cacctcacac ccaccctgg gcacatcttagg actggagggg	804
ctccttgaa aactggaaga agtctcaaca ctgtttcttt ttca	848

<210> 36  
 <211> 207  
 <212> PRT  
 <213> Homo sapiens

<400> 36  
 Leu Glu Lys Cys Gly Trp Tyr Trp Gly Pro Met Asn Trp Glu Asp Ala  
 1                5                10                15  
  
 Glu Met Lys Leu Lys Gly Lys Pro Asp Gly Ser Phe Leu Val Arg Asp  
 20                25                30

Ser	Ser	Asp	Pro	Arg	Tyr	Ile	Leu	Ser	Leu	Ser	Phe	Arg	Ser	Gln	Gly
35							40					45			
Ile	Thr	His	His	Thr	Arg	Met	Glu	His	Tyr	Arg	Gly	Thr	Phe	Ser	Leu
50						55					60				
Trp	Cys	His	Pro	Lys	Phe	Glu	Asp	Arg	Cys	Gln	Ser	Val	Val	Glu	Phe
65					70				75					80	
Ile	Lys	Arg	Ala	Ile	Met	His	Ser	Lys	Asn	Gly	Lys	Phe	Leu	Tyr	Phe
	85							90						95	
Leu	Arg	Ser	Arg	Val	Pro	Gly	Leu	Pro	Pro	Thr	Pro	Val	Gln	Leu	Leu
	100						105						110		
Tyr	Pro	Val	Ser	Arg	Phe	Ser	Asn	Val	Lys	Ser	Leu	Gln	His	Leu	Cys
	115						120						125		
Arg	Phe	Arg	Ile	Arg	Gln	Leu	Val	Arg	Ile	Asp	His	Ile	Pro	Asp	Leu
	130					135					140				
Pro	Leu	Pro	Lys	Pro	Leu	Ile	Ser	Tyr	Ile	Arg	Lys	Phe	Tyr	Tyr	Tyr
145					150					155				160	
Asp	Pro	Gln	Glu	Glu	Val	Tyr	Leu	Ser	Leu	Lys	Glu	Ala	Gln	Arg	Gln
	165								170					175	
Phe	Pro	Asn	Arg	Ser	Lys	Arg	Trp	Asn	Pro	Pro	Arg	Ser	Glu	Gly	Leu
	180						185						190		
Pro	Ala	Gly	His	His	Gln	Gly	His	Leu	Val	Ala	Lys	Leu	Gln	Leu	
	195						200						205		

<210> 37  
<211> 464  
<212> DNA  
<213> Mus musculus

<400> 37  
gttccaagcc taacccatct ttgtcgttt gaaattcggg ccagtctaaa agcagagcac 60  
cttcactctg acatttcat ccatcagttg ccacttccca gaagtctgca gaactatttg 120  
ctctatgaag aggtttaag aatgaatgag attctagaac cagcagctaa tcaggatgga 180  
gaaaccagca aggccacctg acacaggtcc ttaattctg ttagtcaca aaagacggct 240  
tgtgtgactg tttggatttg gtgatcaa gtccatgtt acagttgctt ttcccagttt 300  
gtgtcttcc caatattgtg aaccttatcc atcttgcctt actcagttt atttctatgt 360  
cactttgtg tgtattattt gtttacctga ccattttcta ctttattctg ctaataaact 420  
gtaattctga aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 464

<210> 38  
<211> 747  
<212> DNA  
<213> Homo sapiens

<400> 38  
ggggatcgaa agcggggct tctggacgc agctctggag acgcggcctc ggaccagcca 60  
ttccgtgtga gaagtggcag cacggcagac tggtaaaca aatggattt acagaggctt 120  
acgcggacac gtgctctaca gttggacttg ctgccaggaa aggcaatgtt aaagtcttaa 180  
ggaaaactgct caaaaaggc cgaagtgtcg atgttgtga taacaggggaa tggatgccaa 240  
ttcatgaagc agcttatcac aactctgttag aatgttgca aatgttaatt aatgcagatt 300  
catctgaaaa ctacattaag atgaagacct ttgaaggaaa ctgtgctttg catctcgctg 360  
caagtcaagg acattggaaa atcgtacaga ttcttttaga agctggggca gatcctaattg 420  
caactacttt agaagaaacg acaccattgt ttttagctgt tgaaaatggaa cagatagatg 480  
tgttaaggct gttgcttcaa cacggagcaa atgttaatgg atcccattct atgtgtggat 540  
ggaactcctt gcaccaggct tctttcagg aaaatgctga gatcataaaa ttgcttctta 600  
gaaaaggagc aaacaaggaa tgccaggatg actttggaat cacaccttta tttgtggctg 660  
ctcagtagtgg ccaagctaga aagcttgaa gcatacttat ttcatccggg tgcaaatgtc 720  
aattgtcaag cttggacaa agctacc 747

<210> 39  
<211> 1018  
<212> DNA  
<213> Homo sapiens

<400> 39  
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ggattgccta gaaatattac tccggaatgg tctacagccc agacgcccag gcgtgccttg 180  
ttttggatt cagttctcct gtgtgcattt gttccaaaa ggaggtggag ctgtagttct 240  
ttgaaattgt gaacattttt ttgaaatatg gagcccagat aaatgaactt catttggcat 300  
actgcctgaa gtacgagaag tttcgatat ttgcgtactt tttgaggaaa gttgctcat 360  
tgggaccatg gaaccatata tatgaatttg taaatcatgc aattaaagca caagcaaat 420  
ataaggagtg gttgccacat cttctggttt ctggatttga cccactgatt ctactgtgca 480  
attcttggat tgactcagtc agcattgaca cccttatctt cactttggag tttactaatt 540

ggaagacact tgcaccagct gttgaaagga tgctctctgc tcgtgcctca aacgcttgg 600  
ttctacagca acatattgcc cactgttcca tccctgaccc atcttgatcg tttggaaatt 660  
cggtccagtc taaaatcaga acgtctacgg tctgacagtt atattagtca gctgccactt 720  
cccagaagcc tacataatta tttgctctat gaagacgttc tgaggatgta tgaagttcca 780  
gaactggcag ctattcaaga tggataaattc agtggaaacta cttaacacag ctaattttt 840  
tctctgaaaa atcatcgaga caaaagagcc acagagtaca agttttatg attttatagt 900  
caaaagatga ttattgattt tcagataggt taggtttgg ggggccagta gttcagttag 960  
aatgtttatg tttacaacta gccttcccag taaaaaaaaaaa aaaaaaaaaaaa aaaaaaaaaa 1018

<210> 40  
<211> 1897

<212> DNA

<213> Mus musculus

<400> 40

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aaacataccc agccttctg gagccggacg agacattcat tgtccctgac tccttttcg 120  
tggccctgga catgratgat gggaccttaa gtttcatcgt ggtggacag tacatggag 180  
tggcttccg gggactcaag ggtaaaaagc tttatcgtt agtggatgcc gtctggggcc 240  
actgtgagat ccgcattgcgc tacttgaacg gacttgatcc tgagccccctg ccactcatgg 300  
acctgtgccg gcgttcggtg cgccatgcgc tggaaaaga ggcctgggt gccatcccc 360  
ctctgccgct acctgcctcc ctcaaaggctt acctcctcta ccagtgtatcc acatcccagg 420  
accgcatac gacagccatc tggtgccaaar tcactgagcc cggtgggtc cgccgacccc 480  
tgcgcctggg atggaagccc acctcagcca tggcagacg tgccccccta tcctaccggc 540  
tgcctctgct gggggAACCT atgccaacgg acttccctt tcccaacact ggctgaagca 600  
gcagcaccca ggcccttccc tgaaccagat gcagagaata aactatgaaa acctctctca 660  
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cccacctggg gggccttggg aggttaagact agtaggaggt gccagggtcg artccaaaag 780  
caggaatggc caggamcagg ccatacagat gaagctcagg atgtcacata ccatggacac 840  
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tgcgggtgct ctgtggcctg tatttattct taaaacagta gcaaaggcca tttatattt 960  
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ggaatgtgtg tgccacacct gtccttgtcc caggccagga ctgtggcaca tgagctggtg 1080  
tgcacagata cacgtatgtc gtcgtgcatt acccctgact agttcctaag tagccctgca 1140  
ccaagcacca gagcagaccc caagagaggc ccgtgcaagt cccatgtcc ccaggtccct 1200  
gcttctgttg cttggact catacaccgg cacacgtgtt tcagcctctt gacttccatg 1260  
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cccaggagag gaatgcctgt cctagcagca cgtacatgga gcacccca a 1560  
ccctctggct gttctcttg ctctagaatc aactccctac attggaaatg tagccatttg 1620  
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aaagctcagg aggctgaggc aggaggattg ctgtcagtgg tgtacagagg tcatggccat 1740  
cctggctat attaacacctt gtccttaag aaaaagaaaa gaaatcaact tccattgaat 1800  
ctgagttctg ctcatttctg cacaggtaca atagatgact tkatttgg 1860  
aatatattta cmtatatata tatttgtaag aagcatt 1897

<210> 41  
<211> 134  
<212> PRT  
<213> Mus musculus

<220>  
<221> UNSURE  
<222> (45)  
<223> Xaa is unsure

<400> 41  
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1 5 10 15

Gln Pro Ser Lys Thr Tyr Pro Ala Phe Leu Glu Pro Asp Glu Thr Phe  
20 25 30

Ile Val Pro Asp Ser Phe Phe Val Ala Leu Asp Met Xaa Asp Gly Thr  
35 40 45

Leu Ser Phe Ile Val Asp Gly Gln Tyr Met Gly Val Ala Phe Arg Gly  
50 55 60

Leu Lys Gly Lys Lys Leu Tyr Pro Val Val Ser Ala Val Trp Gly His  
65 70 75 80

Cys Glu Ile Arg Met Arg Tyr Leu Asn Gly Leu Asp Pro Glu Pro Leu  
85 90 95

Pro Leu Met Asp Leu Cys Arg Arg Ser Val Arg Leu Ala Leu Gly Lys  
100 105 110

Glu Arg Leu Gly Ala Ile Pro Ala Leu Pro Leu Pro Ala Ser Leu Lys  
115 120 125

Ala Tyr Leu Leu Tyr Gln  
130

<210> 42

<211> 265

<212> DNA

<213> Homo sapiens

<400> 42

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gctacttgaa cggactcgat cccgagactg ccgcctcatgg atttgtgccg tcgctcggtg 120  
cgccctggccc tggggagggta ggcgcctgggg gagaaccaca cctgcccgtg ccggcttccc 180  
tcaaggccta ctcctctac cagtgacgtt cgccatcata cgcgcagcgc gacagccacc 240  
tggtgccaaac tcactgagcc gcctg 265

<210> 43

<211> 2438

<212> DNA

<213> Mus musculus

<400> 43

aagtggcggc ggtccctgga gagcaggcgg aggcaagcggc aagtctgact ctgggctgac 60  
cgtggagccg gggcgggggc tgacagccag gcctccgcct ggcgggagcc gcacgaggag 120  
cgggagtggc cgggcctctc ttccgcgtt gagcgagcgc cgggtgatgg cgggtggat 180  
ggcggcaggc gctcggacag ctccgcttga gctgagctcg gagagatccg tccagaaaat 240  
gccccagaaga aacttcctct tagaaaaagct gaaaaacaca rtatttatata cactggaaat 300  
tgtaaagaat ttgtttaaaa tggctgaaaa caatagtaaa aatgttagatg tacggcctaa 360  
aacaagtcgg agtcgaagtg ctgacaggaa ggatggttat gtgtggagtg gaaagaagtt 420  
gtcttggtcc aaaaagagtg agagttgttc tgaatctgaa gccataggtt ctgttgagaa 480  
tgttgaattt cctctaagaa gccaagaaaag gcagcttagc tggtcgcca ttgagttgga 540  
cttagatcat tcctgtgggc atagattttt aggccgatcc cttaaacaga aactgcaaga 600

tgccgtgggg cagtgtttc caataaagaa ttgttagtggc cgacactctc cagggcttcc 660  
atctaaaaga aagattcata tcagtgaact catgttagat aagtgcctt tcccacctcg 720  
ctcagattta gccttaggt ggcatttat taaacgacac actgttccta tgagtcccaa 780  
ctcagatgaa tgggtgagtg cagacctgtc tgagagaaaa ctgagagatg ctcagctgaa 840  
acgaagaaac acagaagatg acataccctg tttctcacat accaatggcc agccttgtgt 900  
cataactgcc aacagtgctt cgtgtacagg tggtcacata actggttcta tgatgaactt 960  
ggtcacaaac aacagcatag aagacagtga catggattca gaggatgaaa ttataacgct 1020  
gtgcacaagc tccagaaaaa ggaataagcc caggtggaa atggaagagg agatcctgca 1080  
gttggaggca cctcctaagt tccacaccca gatcgactac gtccactgcc ttgttccaga 1140  
cctccttcag atcagtaaca atccgtgcta ctgggtgtc atggacaaat atgcagccga 1200  
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aagcaggtgt ttggtttgt tttaccata taaattaca tatggtccag gcatattac 1860  
aatttcaagg cattgcatat acattgaat attctgtatt tttaaataa tctttgtt 1920  
tttcctatgt gtgaaatatt ttgctaattt atgctatcag tattcttgc tgaccgaata 1980  
gttacctatt ctctttcat cttgaagatt ttcagtaaag agtgttgtaa tcaatccatt 2040  
ataatgtat tgactttgt aatttgc当地 taggagtgtt aaacaacaaa atgatttaaa 2100  
atgaaactta atgtatccc attttaata ttaactaac caagttgtt tgtagttat 2160  
tctagccat aagaaaagag aatgttagcat cctagaggtg tatttgc当地 gcagttggc 2220  
aggaccgtca gttagtc当地 ataaacatcc cctcagcgtg gaggcgaatg gaacctgtgc 2280

tccttctta cggaaagctt tgcaaagcaa aatagcaggg ttacaagctt ggagtttta 2340  
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ttgggaaactc tagttccag gggaaaatac ctcgtgcc 2438

<210> 44  
<211> 542  
<212> PRT  
<213> Mus musculus

<220>  
<221> UNSURE  
<222> (94)  
<223> Xaa is unsure

<400> 44  
Ser Gly Gly Gly Pro Trp Arg Ala Gly Gly Ser Gly Lys Ser Asp  
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Ser Gly Leu Thr Val Glu Pro Gly Arg Gly Leu Thr Ala Arg Pro Pro  
20 25 30  
Pro Gly Gly Ser Arg Thr Arg Ser Gly Ser Gly Arg Ala Ser Leu Pro  
35 40 45  
Arg Leu Ser Glu Arg Arg Val Met Ala Val Val Met Ala Ala Gly Ala  
50 55 60  
Arg Thr Ala Pro Leu Glu Leu Ser Ser Glu Arg Ser Val Gln Lys Val  
65 70 75 80  
Pro Arg Arg Asn Phe Leu Leu Glu Lys Leu Lys Asn Thr Xaa Phe Ile  
85 90 95  
Thr Leu Glu Ile Val Lys Asn Leu Phe Lys Met Ala Glu Asn Asn Ser  
100 105 110  
Lys Asn Val Asp Val Arg Pro Lys Thr Ser Arg Ser Arg Ser Ala Asp  
115 120 125  
Arg Lys Asp Gly Tyr Val Trp Ser Gly Lys Leu Ser Trp Ser Lys  
130 135 140  
Lys Ser Glu Ser Cys Ser Glu Ser Glu Ala Ile Gly Thr Val Glu Asn  
145 150 155 160  
Val Glu Ile Pro Leu Arg Ser Gln Glu Arg Gln Leu Ser Cys Ser Ser  
165 170 175  
Ile Glu Leu Asp Leu Asp His Ser Cys Gly His Arg Phe Leu Gly Arg  
180 185 190

Ser Leu Lys Gln Lys Leu Gln Asp Ala Val Gly Gln Cys Phe Pro Ile  
 195 200 205  
 Lys Asn Cys Ser Gly Arg His Ser Pro Gly Leu Pro Ser Lys Arg Lys  
 210 215 220  
 Ile His Ile Ser Glu Leu Met Leu Asp Lys Cys Pro Phe Pro Pro Arg  
 225 230 235 240  
 Ser Asp Leu Ala Phe Arg Trp His Phe Ile Lys Arg His Thr Val Pro  
 245 250 255  
 Met Ser Pro Asn Ser Asp Glu Trp Val Ser Ala Asp Leu Ser Glu Arg  
 260 265 270  
 Lys Leu Arg Asp Ala Gln Leu Lys Arg Arg Asn Thr Glu Asp Asp Ile  
 275 280 285  
 Pro Cys Phe Ser His Thr Asn Gly Gln Pro Cys Val Ile Thr Ala Asn  
 290 295 300  
 Ser Ala Ser Cys Thr Gly Gly His Ile Thr Gly Ser Met Met Asn Leu  
 305 310 315 320  
 Val Thr Asn Asn Ser Ile Glu Asp Ser Asp Met Asp Ser Glu Asp Glu  
 325 330 335  
 Ile Ile Thr Leu Cys Thr Ser Ser Arg Lys Arg Asn Lys Pro Arg Trp  
 340 345 350  
 Glu Met Glu Glu Glu Ile Leu Gln Leu Glu Ala Pro Pro Lys Phe His  
 355 360 365  
 Thr Gln Ile Asp Tyr Val His Cys Leu Val Pro Asp Leu Leu Gln Ile  
 370 375 380  
 Ser Asn Asn Pro Cys Tyr Trp Gly Val Met Asp Lys Tyr Ala Ala Glu  
 385 390 395 400  
 Ala Leu Leu Glu Gly Lys Pro Glu Gly Thr Phe Leu Leu Arg Asp Ser  
 405 410 415  
 Ala Gln Glu Asp Tyr Leu Phe Ser Val Ser Phe Arg Arg Tyr Ser Arg  
 420 425 430  
 Ser Leu His Ala Arg Ile Glu Gln Trp Asn His Asn Phe Ser Phe Asp  
 435 440 445  
 Ala His Asp Pro Cys Val Phe His Ser Pro Asp Ile Thr Gly Leu Leu  
 450 455 460  
 Glu His Tyr Lys Asp Pro Ser Ala Cys Met Phe Phe Glu Pro Leu Leu  
 465 470 475 480  
 Ser Thr Pro Leu Ile Arg Thr Phe Pro Phe Ser Leu Gln His Ile Cys  
 485 490 495

Arg Thr Val Ile Cys Asn Cys Thr Thr Tyr Asp Gly Ile Asp Ala Leu  
500 505 510

Pro Ile Pro Ser Pro Met Lys Leu Tyr Leu Lys Glu Tyr His Tyr Lys  
515 520 525

Ser Lys Val Arg Leu Leu Arg Ile Asp Val Pro Glu Gln Gln  
530 535 540

<210> 45

<211> 5000

<212> DNA

<213> Mus musculus

<400> 45

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tggaaagtcc ttacttcagg aagggtggca gatgaggagc aagggaacat tttatcagga 180  
ctgccacaaa ggagtctttt ttttaatgg ttttcaaga cagggtttct ctgtatagcc 240  
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tcaattaagg ttcgttcctt tcagataact cttagttctg ggtcaagctg acacaaggct 420  
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aacttatgca catttgtgag cttccacttg ggagtggaa cctgaactgg gtcctctgca 540  
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gaaacagggta ttcaagacca gctctggct acagagcccg tcctgtccta ggtatggctta 720  
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cacacacaca cacacacaca cacaatccaa ggcgatgacg tcataaagg 1560  
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gcgtccgcag ccccgctgga gccggaagca gtggctggc aggggcgtt ctgccttcc 1920  
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gccccggcgtt agagccagca aggggacggt tcacggtaag gtctgggga gagagagctc 2040  
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gttagggac caagggaaaga ccaggctggt tggcatacac cggtaacgg atggagtc 2160  
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<211> 264  
<212> PRT  
<213> Mus musculus

<400> 46  
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35 40 45  
Asn Pro Lys Asp Cys Ser Glu Asn Ile Asp Val Lys Glu Gly Gly Leu  
50 55 60  
Cys Phe Glu Arg Arg Pro Val Ala Gln Ser Thr Asp Gly Val Arg Gly  
65 70 75 80  
Lys Arg Gly Tyr Ser Arg Gly Leu His Ala Trp Glu Ile Ser Trp Pro  
85 90 95  
Leu Glu Gln Arg Gly Thr His Ala Val Val Gly Val Ala Thr Ala Leu  
100 105 110  
Ala Pro Leu Gln Ala Asp His Tyr Ala Ala Leu Leu Gly Ser Asn Ser  
115 120 125  
Glu Ser Trp Gly Trp Asp Ile Gly Arg Gly Lys Leu Tyr His Gln Ser  
130 135 140  
Lys Gly Leu Glu Ala Pro Gln Tyr Pro Ala Gly Pro Gln Gly Glu Gln  
145 150 155 160  
Leu Val Val Pro Glu Arg Leu Leu Val Val Leu Asp Met Glu Glu Gly  
165 170 175

Thr Leu Gly Tyr Ser Ile Gly Gly Thr Tyr Leu Gly Pro Ala Phe Arg  
180 185 190

Gly Leu Lys Gly Arg Thr Leu Tyr Pro Ser Val Ser Ala Val Trp Gly  
195 200 205

Gln Cys Gln Val Arg Ile Arg Tyr Met Gly Glu Arg Arg Val Glu Glu  
210 215 220

Pro Gln Ser Leu Leu His Leu Ser Arg Leu Cys Val Arg His Ala Leu  
225 230 235 240

Gly Asp Thr Arg Leu Gly Gln Ile Ser Thr Leu Pro Leu Pro Pro Ala  
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Met Lys Arg Tyr Leu Leu Tyr Lys  
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<210> 47

<211> 5615

<212> DNA

<213> Homo sapiens

<400> 47

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<210> 48  
<211> 263  
<212> PRT  
<213> *Homo sapiens*

<400> 48  
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 Gln Ala Leu Tyr Pro Asp Leu Ser Cys Pro Glu Gly Leu Glu Glu Leu  
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Leu Ser Ala Pro Pro Asp Leu Gly Ala Gln Arg Arg His Gly Trp  
     35                        40                        45  
 Asn Pro Lys Asp Cys Ser Glu Asn Ile Glu Val Lys Glu Gly Gly Leu  
     50                        55                        60  
 Tyr Phe Glu Arg Arg Pro Val Ala Gln Ser Thr Asp Gly Ala Arg Gly  
     65                        70                        75                        80  
 Lys Arg Gly Tyr Ser Arg Gly Leu His Ala Trp Glu Ile Ser Trp Pro  
     85                        90                        95  
 Leu Glu Gln Arg Gly Thr His Ala Val Val Gly Val Ala Thr Ala Leu  
     100                       105                       110  
 Ala Pro Leu Gln Thr Asp His Tyr Ala Ala Leu Leu Gly Ser Asn Ser  
     115                       120                       125  
 Glu Ser Trp Gly Trp Asp Ile Gly Arg Gly Lys Leu Tyr His Gln Ser  
     130                       135                       140  
 Lys Gly Pro Gly Ala Pro Gln Tyr Pro Ala Gly Thr Gln Gly Glu Gln  
     145                       150                       155                       160  
 Leu Glu Val Pro Glu Arg Leu Leu Val Val Leu Asp Met Glu Glu Gly  
     165                       170                       175  
 Thr Leu Gly Tyr Ala Ile Gly Gly Thr Tyr Leu Gly Pro Ala Phe Arg  
     180                       185                       190  
 Gly Leu Lys Gly Arg Thr Leu Tyr Pro Ala Val Ser Ala Val Trp Gly  
     195                       200                       205  
 Gln Cys Gln Val Arg Ile Arg Tyr Leu Gly Glu Arg Arg Ala Glu Pro  
     210                       215                       220  
 His Ser Leu Leu His Leu Ser Arg Leu Cys Val Arg His Asn Leu Gly  
     225                       230                       235                       240  
 Asp Thr Arg Leu Gly Gln Val Ser Ala Leu Pro Leu Pro Pro Ala Met  
     245                       250                       255  
 Lys Arg Tyr Leu Leu Tyr Gln  
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<210> 49  
 <211> 28  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:Primer

<400> 49  
 agctagatct ggaccctaca atggcagc

28

<210> 50  
<211> 36  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Primer

<400> 50  
agcttagatct gccatcctac tcgaggggcc agctgg 36

<210> 51  
<211> 128  
<212> PRT  
<213> Mus musculus

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<222> (1)  
<223> Xaa is Leu, Ile, Val, Met, Ala or Pro

<220>  
<221> UNSURE  
<222> (2)  
<223> Xaa is any amino acid residue

<220>  
<221> UNSURE  
<222> (3)  
<223> Xaa is Pro, Thr or Ser

<220>  
<221> UNSURE  
<222> (4)  
<223> Xaa is Leu, Ile, Val, Met, Ala or Pro

<220>  
<221> UNSURE  
<222> (5)  
<223> Xaa is any amino acid

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<222> (6)  
<223> Xaa is any amino acid

<220>  
<221> UNSURE  
<222> (7)  
<223> Xaa is Leu, Ile, Val, Met, Ala, Phe, Tyr or Trp

<220>  
<221> UNSURE

<222> (8)  
<223> Xaa is Cys, Thr or Ser

<220>  
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<222> (9)  
<223> Xaa is Arg, Lys or His

<220>  
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<222> (10)  
<223> Xaa is any amino acid

<220>  
<221> UNSURE  
<222> (11)  
<223> Xaa is any amino acid

<220>  
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<223> Xaa is Leu, Ile, Val, Met, Ala or Pro

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<221> UNSURE  
<222> (13)  
<223> Xaa is any amino acid

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<222> (15)  
<223> Xaa is any amino acid

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<223> Xaa is Leu, Ile, Val, Met, Ala, Pro, Gly, Cys, Thr or Ser

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<222> (17)..(66)  
<223> Xaa can be any amino acid or no amino acid. Position 17-66 can be 1-50 amino acids.

<220>  
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<223> Xaa is Leu, Ile, Val, Met, Ala or Pro

<220>

<221> UNSURE  
<222> (68)  
<223> Xaa is any amino acid

<220>  
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<222> (69)  
<223> Xaa is any amino acid

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<222> (70)  
<223> Xaa is Leu, Ile, Val, Met, Ala or Pro

<220>  
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<223> Xaa is Leu, Ile, Val, Met, Ala, Pro or Gly

<220>  
<221> UNSURE  
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<223> Xaa is Pro or Asn

<220>  
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<222> (74)..(123)  
<223> Xaa can be any amino acid or no amino acid. Position 74-123  
can be 0-50 amino acids.

<220>  
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<222> (124)  
<223> Xaa is Leu, Ile, Val, Met, Ala or Pro

<220>  
<221> UNSURE  
<222> (125)..(128)  
<223> Xaa is any amino acid

<400> 51  
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Xaa  
20 25 30

Xaa  
35 40 45

Xaa  
50 55 60

Xaa Xaa Xaa Xaa Xaa Xaa Pro Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
65 70 75 80

Xaa  
85 90 95

Xaa  
100 105 110

Xaa  
115 120 125

<210> 52  
<211> 34  
<212> PRT  
<213> *Mus musculus* or *Rattus norvegicus*

<400> 52  
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1 5 10 15

Gly Arg Glu Asn Leu Ala Arg Ile Pro Leu Asn Pro Val Leu Arg Asp  
20 25 30

Tyr Leu

<210> 53  
<211> 32  
<212> PRT  
<213> *Mus musculus*

<400> 53  
Ala Pro Thr Leu Gln His Phe Cys Arg Leu Ala Ile Asn Lys Cys Thr  
1 5 10 15

Gly Thr Ile Trp Gly Leu Pro Leu Pro Thr Arg Leu Lys Asp Tyr Leu  
20 25 30

<210> 54  
<211> 33  
<212> PRT  
<213> *Mus musculus*

<400> 54  
Val Ala Thr Leu Gln His Leu Cys Arg Lys Thr Val Asn Gly His Leu  
1 5 10 15

Asp Ser Tyr Glu Lys Val Thr Gln Leu Pro Gly Pro Ile Arg Glu Phe  
20 25 30

Leu

<210> 55

<211> 34  
<212> PRT  
<213> Homo sapiens

<400> 55  
Val Arg Pro Leu Gln Glu Leu Cys Arg Gln Arg Ile Val Ala Thr Val  
1 5 10 15  
Gly Arg Glu Asn Leu Ala Arg Ile Pro Leu Asn Pro Val Leu Arg Asp  
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Tyr Leu

<210> 56  
<211> 34  
<212> PRT  
<213> Mus musculus

<400> 56  
Val Pro Ser Leu Gln His Ile Cys Arg Met Ser Ile Arg Arg Val Met  
1 5 10 15

Ser Thr Gln Glu Val Gln Lys Leu Pro Val Pro Ser Lys Ile Leu Ala  
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Phe Leu

<210> 57  
<211> 34  
<212> PRT  
<213> Mus musculus

<400> 57  
Pro Phe Ser Leu Gln Tyr Ile Cys Arg Ala Val Ile Cys Arg Cys Thr  
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Thr Tyr Asp Gly Ile Asp Gly Leu Pro Leu Pro Ser Met Leu Gln Asp  
20 25 30

Phe Leu

<210> 58  
<211> 37  
<212> PRT  
<213> Mus musculus

<400> 58  
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1 5 10 15

Gly Lys Tyr Arg Leu His Leu Val Pro Ser Leu Pro Leu Pro Asp Pro  
20 25 30

Ile Lys Lys Phe Leu  
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<210> 59  
<211> 37  
<212> PRT  
<213> Mus musculus

<400> 59  
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Glu Gly Cys Leu Pro His Ala Leu Pro Arg Leu Pro Leu Pro Pro Arg  
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Met Leu Arg Phe Leu  
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<210> 60  
<211> 34  
<212> PRT  
<213> Homo sapiens

<400> 60  
Val Arg Ser Leu Gln Tyr Leu Cys Arg Phe Val Ile Cys Gln Tyr Thr  
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Arg Ile Asp Leu Ile Gln Lys Leu Pro Leu Pro Asn Lys Met Lys Asp  
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Tyr Leu

<210> 61  
<211> 37  
<212> PRT  
<213> Mus musculus

<400> 61  
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Gly Lys Tyr Arg Ile Lys Leu Leu Asp Thr Leu Pro Leu Pro Gly Arg  
20 25 30

Leu Ile Arg Tyr Leu  
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<210> 62  
<211> 34  
<212> PRT  
<213> Homo sapiens

<400> 62  
Val Lys Ser Leu Gln His Leu Cys Arg Phe Arg Ile Arg Gln Tyr Thr  
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Tyr Ile

<210> 63  
<211> 40  
<212> PRT  
<213> Mus musculus

<400> 63  
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Lys Ala Glu His Leu His Ser Asp Ile Phe Ile His Gln Leu Pro Leu  
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Pro Arg Ser Leu Gln Asn Tyr Leu  
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<210> 64  
<211> 37  
<212> PRT  
<213> Mus musculus

<400> 64  
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<210> 65  
<211> 34  
<212> PRT  
<213> Mus musculus

<400> 65  
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Thr Tyr Asp Gly Ile Asp Ala Leu Pro Ile Pro Ser Pro Met Lys Leu  
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Tyr Leu

<210> 66  
<211> 37  
<212> PRT  
<213> Mus musculus

<400> 66  
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20 25 30

Met Lys Arg Tyr Leu  
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Gly Asp Thr Arg Leu Gly Gln Val Ser Ala Leu Pro Leu Pro Pro Ala  
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Met Lys Arg Tyr Leu  
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Thr Thr Tyr Gln Val Leu Ala Leu Pro Ile Pro Lys Lys Met Lys Glu  
20 25 30

Phe Leu